

Claims

What is claimed is:

1. A method for extending enterprise data to a mobile device, the system comprising:
 - 5 creating a domain data store comprised of data relating to an enterprise system;
 - establishing a communication link with a mobile computing device, the mobile computing device including a mobile data store comprised of at least a portion of the data;
 - 10 receiving transactions from the mobile computing device, the transactions comprising at least partially data operations performed on the mobile data store prior to the communication link being established;
 - modifying the domain data store to reflect the transactions; and
 - 15 communicating a portion of the domain data store to the enterprise system.
2. The method of claim 1, further comprising:
 - transmitting over a wireless communication link an application to the mobile computing device, the application operable to create the mobile data store on the mobile computing device.

3. The method of claim 1, further comprising:

receiving updates to the data from the enterprise system;

modifying the domain data store to reflect the updates; and

transmitting at least a portion of the domain data store to the mobile computing device.

5 4. The method of Claim 3, further comprising determining the portion of the domain data store to be transmitted to the mobile computing device based upon characteristics of the mobile computing device.

5. The method of Claim 3, further comprising determining the portion to be transmitted to the mobile computing device based upon an identity of a user of the mobile computing device.

10 6. The method of Claim 1, further comprising periodically synchronizing the domain data store with the data from the enterprise system.

7. The method of claim 6, wherein the synchronizing step comprises:

modifying the domain data store to reflect changes in the data initiated by the enterprise system; and

15 modifying the data on the enterprise system to reflect changes in the domain data store.

8. The method of Claim 6, wherein the synchronizing step is performed at regular time intervals.

9. The method of Claim 6, wherein the synchronizing step is performed on an interrupt basis.

10. The method of Claim 1, further comprising authenticating a user of the mobile computing device prior to the modifying step.

11. The method of Claim 1, wherein the communications link comprises a wireless
5 communications link.

12. A method for extending enterprise data to a mobile device, the system comprising:

creating a domain data store comprised of data relating to an enterprise system;

establishing a wireless communication link with a mobile computing device, the mobile computing device including a mobile data store comprised of at least a portion of the data;

5 synchronizing the mobile data store with the domain data store;

modifying the domain data store to reflect the synchronization; and

communicating a portion of the domain data store to the enterprise system.

13. The method of Claim 12, wherein the synchronizing step comprises receiving transactions from the mobile computing device, the transactions comprising at least partially data operations performed on the mobile data store prior to the communication link being established.

14. The method of Claim 12, wherein the synchronizing step further comprises transmitting updates to the mobile data store, the updates comprising modifications to the data.

15. The method of Claim 14, further comprising determining the portion of the domain data store to be transmitted to the mobile computing device based upon characteristics of the mobile computing device.

16. The method of Claim 14, further comprising determining the portion to be transmitted to the mobile computing device based upon an identity of a user of the mobile computing device.

17. The method of Claim 12 further comprising attempting the establishing step at regular intervals.

18. The method of Claim 12 further comprising performing the establishing step on an interrupt 5 basis.

19. The method of Claim 18 wherein the interrupt comprises a signal that the mobile computing device is available for wireless communication.

20. A method for accessing enterprise data from a mobile device, comprising:

storing a mobile data store, the mobile data store comprised of at least a portion of data from an enterprise system;

5 creating transactions comprising data operations performed on the mobile data store;

establishing a communication link after creating the transactions with a mobile application server, wherein the mobile application server interfaces to a domain data store separate from the enterprise system; and

transmitting the transactions to the domain data store.

10 21. The method of Claim 20, wherein the communication link comprises a wireless communication link.

22. The method of claim 20, further comprising receiving over a wireless communication link an application, the application operable to create the mobile data store.

15 23. The method of Claim 20, further comprising:

receiving updates to the data from the domain data store; and

modifying the mobile data store to reflect the updates.

24. The method of Claim 20, wherein the establishing, transmitting, receiving, and modifying steps are repeated periodically.

25. The method of Claim 20, wherein the establishing step includes sending information to the mobile application server for authentication.
26. The method of Claim 20, further comprising signaling to the mobile application server that the mobile device is available for wireless communication.

27. A system for extending enterprise data to a mobile device, the system comprising:

5 a mobile application server operable to interface to an enterprise system and a mobile computing device; and

10 a domain data store communicatively coupled to the mobile application server, the domain data store operable to store data from the enterprise system;

wherein the mobile application server is operable to:

15 establish a communication link with a mobile computing device;

20 receive transactions from the mobile computing device, the transactions comprising data operations performed on a mobile data store prior to the establishment of a wireless communication link;

25 modify the domain data store to reflect the transactions; and

30 communicate a portion of the domain data store to the enterprise system.

28. The system of Claim 27, wherein the mobile application server comprises executable code stored on a single computing platform.

29. The system of Claim 27, wherein the mobile application server comprises:

a primary server;

an integration server communicatively coupled to the primary server and interfacing to the enterprise system;

5 a connection server communicatively coupled to the primary server and interfacing to the mobile computing device; and

a data management server communicatively coupled to the primary server, the integration server, the integration server, and the domain data store.

30. A system for accessing enterprise data remotely, comprising:

a computer readable medium; and

application stored on the computer readable medium, the application operable to:

store a mobile data store, the mobile data store comprised of at least a portion of data

5 from an enterprise system;

create transactions comprising data operations performed on the mobile data store;

establish a communication link after creating the transactions with a mobile application server, wherein the mobile application server interfaces to a domain data store separate from the enterprise system; and

transmit the transactions to the domain data store.

10 31. The system of Claim 30, wherein the communication link comprises a wireless communication link.

32. A system for accessing enterprise data remotely, comprising:

a mobile computing device; and

a colonist stored on the mobile computing device;

wherein the colonist is operable to:

5 establish a communication link with an application server having a domain data store;

receive an application, the application executable to form a mobile data store, the mobile data store comprised of at least a portion of data from a domain data store, the domain data store separate from an enterprise system.

10 33. The system of Claim 32, wherein the communication link comprises a wireless communication link.

34. A system for extending enterprise data to a mobile device, the system comprising:

5 a computer readable medium; and

 a mobile application server stored on the computer readable medium, the mobile application server operable to interface to an enterprise system, a domain data store, and a mobile computing device;

 wherein the mobile application server is further operable to:

 10 establish a communication link with a mobile computing device;

 receive transactions from the mobile computing device, the transactions comprising data operations performed on a mobile data store prior to the establishment of a wireless communication link;

 modify the domain data store to reflect the transactions; and

 communicate a portion of the domain data store to the enterprise system.

35. A system for extending enterprise data to a mobile device, the system comprising:

 a mobile application server for interfacing to an enterprise system;

 a domain data store communicatively coupled to the mobile application server, the domain data store comprised of data from the enterprise system;

 5 a mobile computing device;

 a mobile application stored on the mobile computing device; and

 a mobile data store communicatively coupled to the mobile application, the mobile data store comprised of at least a portion of the data;

 wherein the mobile application server is operable to transmit the portion over a wireless communication link based upon characteristics of the mobile computing device.

10 36. The system of Claim 35, wherein the portion is created prior to an establishment of a wireless communication link between the mobile application server and the mobile computing device.

37 The system of Claim 36, wherein the portion is created by pre-processing data from the enterprise system in anticipation of the establishment of the communication link.